

Publications

Wildlife Conservation in China: Preserving the Habitat of China's Wild West by Richard B. Harris (2007), 384 pp., M.E. Sharpe, New York, USA. ISBN 9780765620576 (hbk), USD 74.95.

In 2008 world attention was on China during the Olympics and, thanks to the excellent BBC series *Wild China*, people's attention was also on the country's wildlife. For those that work in conservation the importance of China, in terms of the species it supports and the challenges it presents, have been known since the late 1980s when the country opened up to non-Chinese scientists. The recent economic growth of China, with its associated increased demand for natural resources and wildlife-derived products, means that the global conservation challenge that China represents has never been bigger. It is opportune then that Richard Harris has written an excellent book that provides a good introduction to wildlife conservation in China, drawing on his 20 years' experience of working in the country.

Although the book does an excellent job of setting the conservation scene in China it is really, as the subtitle suggests, a book about western China. The book is well written in an easy to read style and is illustrated with some nice photos. I personally would have preferred to have them scattered through the text rather than in a single block in the middle of the book but this doesn't affect the book's readability or appeal.

The book starts off by setting the biological, geographical and political landscape of the region and this should be essential reading for anyone (Chinese and non-Chinese alike) starting a career in conservation or undertaking wildlife research in the country. Of particular interest for me (as a bunny-hugging Westerner) is the chapter on The Chinese Perceptions of Wildlife. An understanding of the linguistic, cultural and religious reasons for the nation's perception of wildlife and how it can be utilized is fundamental for anyone wishing to work within the field of conservation and influence the way it is undertaken. The range of information contained within this chapter alone is extensive and should be essential reading. I very much enjoyed the section of the book that provides the species stories, and the cameos of selected species is an interesting read. The book has a very interesting chapter on the controversial subject of trophy hunting and

concludes with a look into the crystal ball to assess the future for wildlife in western China.

In addition to the text, which I guess I have made clear is an interesting read, there are just over 100 pages of supporting information in the form of an appendix, notes on each chapter, and about 50 pages of references, a valuable resource in itself. This does make one wonder, however, whether it is a bit over the top for 30% of a 341-page book to be made up of such information.

All in all this is a very good book that I enjoyed reading and learning from. I have heard rumours that a Chinese version is under preparation and if true I hope that it is widely read within China.

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The Dominant Animal: Human Evolution and the Environment

Paul R. Ehrlich and Anne H. Ehrlich (2008), 426 pp., Island Press/Shearwater Books, Washington, DC, USA. ISBN 9781597260961 (hbk), USD 23.10/GBP 21.95.

In the latest of a long list of thoughtful books written by Paul and Anne Ehrlich, they have again come out swinging against the behavioural excesses of our species. Following a line of argument Paul Ehrlich launched back in 1968 with *The Population Bomb* and quickly followed by *Population, Resources, Environment* in 1970, they have substantially broadened their critique of modern society and brought it up to date. Heaven knows, they have plenty to complain about, and they do an excellent job of mobilizing the case for the prosecution.

They are convinced that science 'can help us better understand the predicament we have created for ourselves and thereby avoid its worst consequences'. Yet, despite substantial increases in science since the late 1960s (computers, DNA, remote sensing, proliferation of high-quality field research, and so forth), the evidence they cite in this book gives scant reassurance on this point, perhaps because avoiding the worst consequences of our behaviour has much to do with politics and economics, and relatively little to do with science. Science may well provide convincing evidence about the dangers of 'fishing down the food chain' but this has done remarkably

little to change the political economy of fisheries.

They consider the lack of knowledge about our relationship with the natural world to be a 'major contributing factor' to the deepening predicament of our species, despite dozens of scientific journals and hundreds of outstanding books on the subject. They end their prologue on an optimistic note: 'By knowing our evolutionary past and understanding the forces that have shaped our present, we will be better positioned to fashion a more sustainable future'.

Yet the remainder of the book essentially refutes this hypothesis, drawing especially on examples in the USA. Their outstanding chapters addressing evolutionary elements of many aspects of society demonstrate that the knowledge of evolution among the scientific community, at least in the USA, is substantial. Yet the country is also a centre of debate over the non-scientific idea of 'intelligent design', a social challenge to Darwinian evolution.

The Ehrlichs help address this seeming paradox by a stimulating discussion of religion, pointing out that even scientists need to accept some things on faith, such as that the physical laws that operated a million years ago still operate and will operate into the future indefinitely. They also suggest that religion persists at least partly because of the 'inability of science to provide a clear basis for ethics'. They call for paying careful attention to the difficulties of perceiving deleterious gradual change and how the various belief systems in the world can help cultures evolve to meet environmental challenges. But they perhaps could also have highlighted what Stephen J. Gould called 'punctuated equilibrium', where the gradual changes are interrupted by extreme events—in social terms, these are often considered revolutions.

The Ehrlichs have brought together a wide range of research, containing some surprising findings. One example is the sudden substantial decline in the crime rate in the USA, appearing around 1990. The Ehrlichs attribute this to the legalization of abortion in the 1970s and the resulting (hypothesized) fewer unwanted children, who often grow up to be socially handicapped adults.

They also refer back to the concern they helped raise about rapid population growth in the 1960s, based on doubts about the capacity to feed an expanding population. But the result has been a growth in food

production that has significantly outstripped the growth in human population. Of course, the world still has 800 million undernourished people, yet has substantial food surpluses as well. But this good news gives them little comfort. 'So, on average and with a given set of technologies, the addition now of each person to the population has a disproportionately negative effect on the environment as poor soils are cultivated to feed her, water is brought from more distant, more polluted sources to supply her, coal mines are dug deeper (and made more dangerous as a result) to generate electricity for her, and oil is transported further to power her car, should she have one'. While it seems a bit unfair to blame all of this on women, the general point is well taken: the easiest resources have already been tapped, and the future will be increasingly challenging. Disappointingly, the chapter on human population says nothing about its potential evolutionary impacts, given the book's overall evolutionary theme.

The Ehrlichs usefully highlight the impacts of pollutants, highlighting the decline in the ratio of male births to half the number of female births in heavily polluted Arctic and Sub-Arctic locations. But the impacts of pollution on human population growth are belied by the continuing expansion of human population in heavily polluted countries such as India and China.

Recalling their work of the 1960s the Ehrlichs rekindle the discussion of a nuclear winter, certainly with some justification. They do not reach the conclusion that a nuclear war would take care of both the population problem and global climate warming, although the alert reader will undoubtedly pose the question, at least subconsciously. Heaven forbid of course.

The justifications they give for preserving biodiversity are fairly standard rhetoric for the readers of this journal, as are the strategies to protect biodiversity. Even so, the packaging of the arguments is useful and helps to provide solid background to our standard arguments.

The Ehrlichs do not always get their geography exactly correct, for example referring to 'Malaysia and Borneo' (the latter contains Sabah and Sarawak, significant proportions of Malaysia), and contend that the Calakmul Biosphere Reserve on the Yucatan Peninsula protects 1.8 million acres of 'virtually untouched tropical forest', even though it is well known that the Maya civilizations a thousand years ago had cleared virtually all of the forests of the Peninsula. It is also a little odd that they make no mention of the World Heritage

Convention, even though they mention that sites such as Yellowstone 'have status as great heritage sites'. It would have been a simple matter to underline the importance of international conservation conventions in this context. Strangely, the Ehrlichs highlight the UN Conference on Environment and Development and its Agenda 21 but forget to mention the Convention on Biological Diversity (perhaps because the USA is one of the tiny handful of non-members of the Convention).

In their epilogue the Ehrlichs emphasize the importance of trade in food and essential resources in fostering a significant interdependence among countries, concluding that self-sufficiency 'in this day and age is a myth'. But in the next paragraph, they advocate rationalizing 'the food system to encourage consumption of foods grown locally and thereby reduce the energy-consuming process of long-distance and international transport of foods'. They offer no reconciliation of these seemingly conflicting perspectives.

Written for a semi-popular audience, *The Dominant Animal* is a useful compilation of some of the latest thinking on the woeful relationship between humans and the rest of nature. But ignoring the main international conservation legislation (if only to highlight its shortcomings) limits the book's utility.

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Climate Change and Forests: Emerging Policy and Market Opportunities edited by Charlotte Streck, Robert O'Sullivan, Toby Janson-Smith and Richard G. Tarasofsky (2008), 360 pp., Brookings Institution Press, Washington, DC, USA. ISBN 9780815781929 (pbk), USD 69.95/GBP 39.99.

Understanding climate change and the role of forest protection as a means of reducing emissions is a popular topic, with many forests needed for the paper to discuss it on. It is therefore easy to become rather daunted by where to turn for a balanced discussion of the subject. This book provides a timely, impressive and comprehensive collection of papers to arm you with all the latest information and key debates.

The book is made up of five sections. A background to the forestry and climate change agenda makes up the first, along with explanation of current market mechanisms for forest conservation. Part two

provides a background to forestry in the United Nations Framework Convention on Climate Change and Kyoto protocol. For anyone approaching this field for the first time or for those with a reasonable understanding of the issues, these two sections provide an accessible and insightful description of both what has occurred to date, why and what the implications of this are for current forest policy.

Part three gets down to business, addressing lessons learnt and methodological considerations for forest carbon projects, including permanence and monitoring carbon credits. Part four deals with the key, but complex issues of how Avoided Deforestation will be incentivized and accounted for post-Kyoto. This section is covering new ground and is therefore very helpful but not easily accessible for anyone without a good understanding of the issues. Some of the technical papers, such as that on carbon accounting, require greater brain power than I had to hand. The final part addresses the experience of national systems and voluntary carbon offset projects.

Some of the case studies, although clearly describing innovative projects, are not sufficiently objective to provide any real insight into the social realities and practical issues facing key stakeholders on the ground. This is a general point within the carbon forestry field, as those involved are often tied into non-disclosure agreements. Greater objectivity and openness on the practicalities and growing pains of projects that have been in existence for some years is, however, crucial to inform future project development.

The main contribution of this book is bringing the expert knowledge and recommendations of the contributors together in one place. This is invaluable for a better understanding of this fast developing field and, as such, this book will only remain relevant if regularly updated. This is likely to be a difficult task. In the short-term what is most important is that the key recommendations are taken forward to shape the developing policy arena. Bearing in mind the range and affiliations of the contributors, it is likely that this has and will continue to occur.

This is a dense read in its entirety. I struggled to make my way through a number of the chapters but would recommend it, particularly well-chosen sections of it, as key reading to anyone wanting to understand the key complexities of this debate.

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